2. A
3. B
4. Before it divides, a cell must make a copy of its deoxyribonucleic acid (DNA).
5. the copying of chromosomes
6. prokaryotic
7. eukaryotic
8. prokaryotic
9. eukaryotic
10. prokaryotic
11. binary fission
12. DNA
13. DNA
14. 46, 8, 48
15. homologous chromosomes
16. Homologous chromosomes have the same sequence of genes and the same structure.
17. organelles, chromosomes
18. chromatids
19. Chromatids are held together at a region called the centromere.
20. mitosis
21. The cell grows and copies its organelles and chromosomes. The chromosomes split into copies called chromatids.The chromatids twist into an X shape.
22. During the second stage of the cell cycle, the chromatids come apart. This separation is called mitosis.
23. During the third stage of the cell cycle, the cell divides into two cells that are identical to each other and to the original cell.
24. B
25. Mitosis Phase 3
26. Mitosis Phase 2
27. Interphase
28. Mitosis Phase 4
29. Mitosis Phase 1
30. Cytokinesis
31. In eukaryotic cells that do not have cell walls, the cell membrane pinches inward until it divides the cytoplasm and splits the cell in two.
32. 3
33. 1
34. 2

Directed Reading B

SECTION : EXCHANGE WITH THE ENVIRONMENT

1. energy and raw materials
2. cell membrane
3. healthy
4. wastes
5. D
6. C
7. A
8. C
9. D
10. A
11. B
12. D
13. C
14. B
15. B
16. A
17. B
18. B
19. B
20. A

SECTION: CELL ENERGY

1. sun
2. food
3. reproduce
4. the sun
5. food
6. photosynthesis
7. energy
8. C
9. B
10. cellular respiration
11. fermentation
12. D
13. C
14. C
15. D
16. A
17. D
18. B
19. A
20. A
21. D
22. B

SECTION: THE CELL CYCLE

1. C
2. A
3. A
4. C
5. C
6. D
7. circular
8. binary fission
9. DNA
10. D
11. B
12. B
13. C
14. A
15. B
16. A
17. C
18. D
19. B
20. C
21. A
22. A

Original content Copyright © by Holt, Rinehart and Winston. Additions and changes to the original content are the responsibility of the instructor.